L15 ANSWER 6 OF 16 CAPLUS COPYRIGHT 2003 ACS
AN 2002:346935 CAPLUS
TI Supramolecular association of diblock **copolymers** prepared by atom transfer radical polymerization
AU **Ranger, M.**; Jones, M.-C.; Yessine, M.-A.; Leroux, J.-C.
CS Faculty of Pharmacy, University of Montreal, Montreal, QC, H3C 3J7, Can.
SO Proceedings - 28th International Symposium on Controlled Release of Bioactive Materials and 4th Consumer & Diversified Products Conference, San Diego, CA, United States, June 23-27, 2001 (2001), Volume 1, 445-446
Publisher: Controlled Release Society, Minneapolis, Minn.
CODEN: 69CNY8
DT Conference
LA English
AB Diblock nonionic and amphiphilic, and ionic **copolymers** were prepd. by atom transfer radical polymn. (ATRP). They were then characterized with regard to their ability to self-assoc. in aq. solns.
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

9-877-999

L15 ANSWER 5 OF 16 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 1
AN 2001:806166 CAPLUS
DN 136:86129
TI From well-defined diblock **copolymers** prepared by a versatile atom transfer radical polymerization method to supramolecular assemblies
AU **Ranger, Maxime**; Jones, Marie-Christine; Yessine, Marie-Andree; Leroux, Jean-Christophe
CS Canadian Research Chair in Drug Delivery, Faculty of Pharmacy, University of Montreal, Montreal, QC, H3C 3J7, Can.
SO Journal of Polymer Science, Part A: Polymer Chemistry (2001), 39(22), 3861-3874
CODEN: JPACEC; ISSN: 0887-624X
PB John Wiley & Sons, Inc.
DT Journal
LA English
AB The synthesis of well-defined diblock **copolymers** by atom transfer radical polymn. (ATRP) was explored in detail for the development of new colloidal carriers. The ATRP technique allowed the prepn. of diblock **copolymers** of poly(ethylene glycol) (PEG) (no.-av. mol. wt.: 2000) and ionic or nonionizable hydrophobic segments. Using monofunctionalized PEG macroinitiator, ionizable and hydrophobic monomers were polymd. to obtain the diblock **copolymers**. This polymn. method provided good control over mol. wts. and mol. wt. distributions, with monomer conversions as high as 98%. Moreover, the copolymn. of hydrophobic and ionizable monomers using the PEG macroinitiator made it possible to modulate the physicochem. properties of the resulting polymers in soln. Depending on the length and nature of the hydrophobic segment, the nonionic **copolymers** could self-assemble in water into nanoparticles or polymeric micelles. For example, the **copolymers** having a short hydrophobic block ($5 < d.p. < 9$) formed polymeric micelles in aq. soln., with an apparent crit. assocn. concn. between 2 and 20 mg/L. The interchain assocn. of PEG-based polymethacrylic acid derivs. was found to be pH-dependent and occurred at low pH. The amphiphilic and nonionic **copolymers** could be suitable for the solubilization and delivery of water-insol. drugs, whereas the ionic diblock **copolymers** offer promising characteristics for the delivery of electrostatically charged compds. (e.g., DNA) through the formation of polyion complex micelles. Thus, ATRP represents a promising technique for the design of new multiblock **copolymers** in drug delivery.
RE.CNT 75 THERE ARE 75 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 11 OF 16 CAPLUS COPYRIGHT 2003 ACS
AN 2000:671801 CAPLUS
DN 134:331484
TI Polymeric micelles of poly(N-vinyl-2-pyrrolidone)-block-poly(DL-lactide)
AU Benahmed, A.; **Ranger, M.**; Leroux, J. - C.
CS Faculty of Pharmacy, University of Montreal, Montreal, QC, H3C 3J7, Can.
SO Proceedings of the International Symposium on Controlled Release of Bioactive Materials (2000), 27th, 37-38
CODEN: PCRMEY; ISSN: 1022-0178
PB Controlled Release Society, Inc.
DT Journal
LA English
AB Diblock **copolymers** of poly(N-vinyl-2-pyrrolidone) (PVP) and poly(DL-lactide) (PDLLA) have been successfully synthesized. PVP-PDLLA chains assoc. to form polymeric micelles with a low crit. aggregation concn. (CAC) and small diam. These micelles are currently being evaluated for the delivery of poorly water sol. anticancer drugs.
RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT